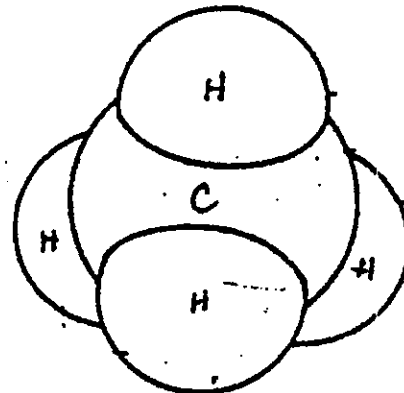
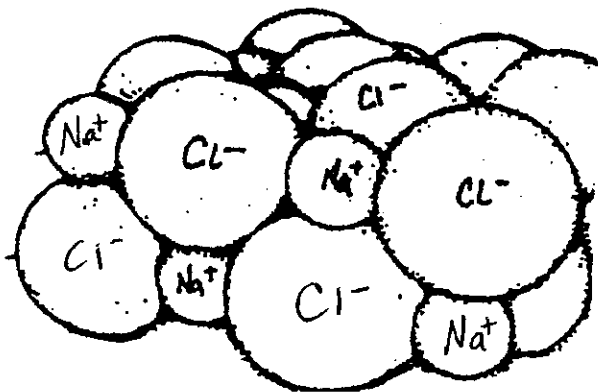


Ionic Bonds

Covalent Bonds

Color With Your Teacher:

Color With Your Teacher:

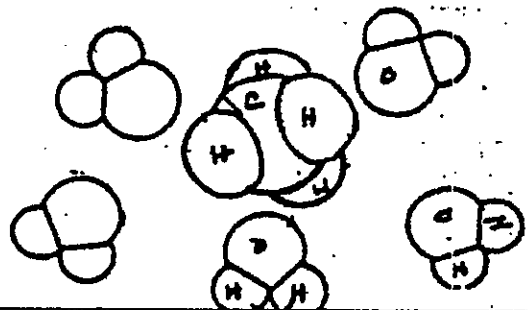
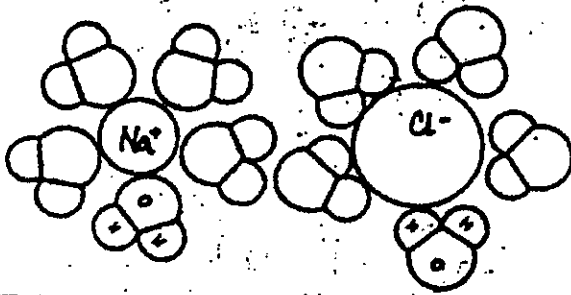


Example: NaCl (sodium chloride)

Example: CH₄ (Methane)

What happens in water:

What happens in water:



Notes:

1.

2.

3.

4.

Notes:

1.

2.

3.

4.

Lewis Dot Diagrams:

Lewis Dot Diagrams:

Compare and contrast ionic and covalent bonds:

1. Name 2 similarities: _____

2. Name 2 differences: _____

3. Patterns in the periodic table: Which groups of atoms form ionic bonds? Which groups form covalent bonds? Use this periodic table to show the patterns:

	1																	18						
1	1 H	2																	2 He					
2	3 Li	4 Be																	5 B	6 C	7 N	8 O	9 F	10 Ne
3	11 Na	12 Mg	3	4	5	6	7	8	9	10	11	12							13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn							31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd							49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
6	55 Cs	56 Ba	*	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg							81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
7	87 Fr	88 Ra	**	104 Rf	105 Ha	106 Sg	107 Ns	108 Hs	109 Mt	110	111	112												

Identify the following compounds as ionic or covalent. Justify your answer!

1. MgO _____ **because** _____

2. CO₂ _____ **because** _____

3. KCl _____ **because** _____

4. F₂ _____ **because** _____

5. Which compounds listed above are solids? _____ Which are gases? _____ How do you know? _____

6. Which compounds listed above are good conductors of electricity?